

Name _____ Date _____

Factoring Review: GCF, Difference of Squares, Trinomials, Guess & Check, Grouping

1. $4x^3 + 8x^2$

2. $2x^2 + 3x - 5$

3. $x^2 + 8x + 12$

4. $18y^6 - 27y^4 + 54y^2$

5. $2x^2 + 15x + 7$

6. $25x^2 - 9$

7. $3x^3 + 2x^2 - 15x - 10$

8. $x^2 - 7x + 12$

9. $16x^2 - 121y^2$

10. $x^3 - 2x^2 - 4x + 8$

11. $14x^7 - 28x^5$

12. $3x^{2m} + 7x^m - 6$

13. $x^2 - 3xy - 28y^2$

14. $3x^3 - 27x$

15. $3x^2 - 6x - 9$

16. $10x^3 - 45x^2 + 14x - 63$

17. $15x^3 - 10x^5$

18. $144x^4 - 9y^2$

19. $5x^2 - 13x + 6$

20. $x^3 - 5x^2 - 9x + 45$

21. $2x^5 - 12x^3$

22. $3x^2 + 14x - 5$

23. $x^2 + 2x - 8$

24. $16x^5 - 24x^3 + 36x^2$

25. $2x^2 - 11x + 9$

26. $4x^{2p} - 9$

27. $2x^3 - 6x^2 + 5x - 15$

28. $x^2 + 12x + 27$

29. $9x^2 - 25y^2$

30. $x^3 + 7x^2 - 9x - 63$

31. $18x^5 + 72x^9$

32. $3x^2 - 7x + 4$

33. $x^2 + 6xy - 27y^2$

34. $2x^3 - 18x$

35. $3x^2 - 12x + 12$

36. $2x^3 + 6x^2 + 9x + 27$

37. $32x^4 - 16x^2$

38. $121x^2 - 49y^2$

39. $9x^4 - 37x^2 + 4$

40. $15x^3 + 6x^2 + 5x + 2$

Error Analysis

Given : $x^3 + 5x^2 - 4x - 20$

$x^2(x+5) - 4(x+5)$

Answer: $(x+5)(x^2-4)$

State the correct answer and explain where the student went wrong.

Given: $9x^2 - 12x + 3$

Answer : $(9x-3)(x+1)$

State the correct answer and explain where the student went wrong.

Given $4x^2 - 225$

Answer: $(2x - 15)(2x - 15)$

State the correct answer and explain where the student went wrong.

Given this Rectangle: Find the expressions that represent the length and width.

